A River For the Taming

Megaplans in the great Stikine wilder

By Lamont Bassett with photographs by Gary Fiegehen

I had been following the caribou calf for two days when its rump [illegible] over the edge of a cornice dividing one high-land water [illegible] from another. [illegible] the snowfield in full pursuit only to be stopped in my [illegible] and spectacular that the disappearing animal was [illegible] Below me stretched a billowing of dome mountains [illegible] a long, green basin. The valley bottom was quilted with patches of [illegible] meadows and stands of spruce, dotted with lakes and beaver ponds [illegible] sheets of water that finally merged into a single river. [illegible]

[illegible] my feelings [illegible] much talked about [illegible] wilderness, a place not only perfectly [illegible] Canada's great rivers. Confronted with [illegible] mighty watercourse, I resolved to return [illegible] and follow the path [illegible] headwaters to the [illegible] delta in the Pacific.

POLAR PAM 4076
POLARPAM

I had collared the calf with a radio transmitter at birth as part of a scientific project to monitor the juvenile mortality of mountain caribou in the Spatsizi wilderness of northern British Columbia, but from this point, the tagged animal would have to be tracked by aircraft. I had come under the spell of a land unique in the world for its untrammelled beauty. Here, in the remote Cassiar Mountains, the Stikine begins a 400-mile run that ensnares some 22,000 square miles of singularly rare wilderness. It is a schizoid river, taking on many different personalities in its course. Incubated in the glaciers of Mounts Umbach and Thule, the river soon swells to life with the addition of the Chukachida, Spatsizi and Pitman Rivers. Then it goes berserk as its midsection funnels through a deep, narrow gorge which is Canada's largest and which is called, without exaggeration, the Grand Canyon.

After breaking free of the gorge's rocky confines, the river follows a sedate course, sloughing through the Chutine Valley and into the Coast Mountains, where fiord corridors are guarded by great glaciers. Finally, the Stikine is joined by the Iskut River from the south and at last mingles with the Pacific, creating as its last act a giant delta depository that extends far into the straits around Wrangell, Alaska.

Despite its obscure reputation, the Stikine is one of the last wild watersheds left on the face of the Earth that has not been diverted, drained or dammed. It harbours an astonishing array of wildlife species, from the large Osborn caribou subspecies to the renowned Petersburg shrimp, while supporting two ancient Indian tribes and a small but stalwart salmon fishery. It is a river claimed and loved by two countries, with friends as disparate as diehard counterculture backpackers and the governor of Alaska.

The Stikine is also a river swirling with controversy, its future threatened by British Columbia Hydro's plans for a megaproject consisting of five major dams – some towering 70 and 75 storeys in the river canyons – and a system of new roads, power lines, tower corridors and huge artificial lakes. In a classic confrontation, the seemingly omnipotent utility has found itself held at bay by ragtag groups of fishermen and hippies and by Indian bands and former employees who have turned against the project. Shots have been fired, Hydro equipment and fuel supplies burned. It is a case of big government nose-to-nose with a relative handful of individuals who see an expensive tragedy in the making. As theatre, it is convoluted and fascinating. As a sign of the times, it may hold lessons that apply well beyond the confines of a little-known corner of Canada where the wolves may still outnumber the humans.

BEGINNINGS AT TUATON

As a wildlife biologist, my underlying biases on the subject might be considered suspect, but the motive for returning to the headwaters of the Stikine four years after the caribou calf incident was neither political nor scientific. I simply wanted to experience the river with three friends: Peter Roland, a commercial airline pilot; Carl Chaplin, an artist from Woodcock, British Columbia; and Gary Fiegehen, a Vancouver photographer.

As our Cessna 185 edged through the divide separating the Stikine and Skeena watersheds, I could make out, through the clouds and mist, the ridge where I had last seen the young caribou. In his stead stood two mountain goats, their shaggy underbellies raven-black from lying in the coal-rich soil. (Spatsizi means red goat, named after the animals that frequent an iron-oxide mountainside near the Gladys Lake Ecological Reserve.) The bush plane left us on Tuaton Lake, and as its engine faded from earshot, bird calls and a rising wind filled the void. With haste prompted by pending rain, we made camp.

From the tent doorway, we could see the storm sending shock waves across the surface of the lake. Along the far shore, willows bent and swayed in a wind amplified by spruce that stretched from shoreline to timberline. At the edge of the alpine, the conifers were reduced to a mutant webbing of fir, slide alder and buck brush intertwining to form a lush netting in six shades of green that anchored the black scree to the steep ridges. Where the lattice had been shredded by avalanches, deep gullies formed, giving dark relief to white bands of falling water. A loon crooned his comic tune. Geese and ducks circled and staged over the valley, preparing for the fall migration. Glaucous-winged and herring gulls (immigrants from the Alaskan coast) skimmed the lakeshore. A bald eagle worked the upland thermals, while a red-tailed hawk cruised the open meadows in search of rodents.

Because of the Stikine's seclusion, man's impact on the wildlife has been minimal. The river is a sanctuary for the world's greatest concentration of Osborn caribou, and hundreds of mountain goats cling to the walls of the Grand Canyon. The boreal forests and mountains of the river basin are heavily inhabited by moose, black bear, grizzly, timber wolf and Stone mountain sheep. Some 140 bird species have been identified along the Stikine, and the river is home to rainbow trout, Dolly Varden, Arctic grayling, steelhead trout and five species of salmon.

Our Stikine River Rat Expedition began on the last day of August, and our departure from camp was celebrated with fresh snow on the surrounding peaks and a double-arch rainbow. It would be the first of many rainbows, each preceded by rain. To reach the ocean lying due west, we would have to go east, north, south and, finally, west, inscribing almost a complete spiral. Our plan was to canoe to the head of the Grand Canyon, where a Landcruiser would portage our luggage around the unnavigable section to Telegraph Creek. Fiegehen and I had made arrangements to fly through the canyon by helicopter to join the others at the lower end.

Tuaton is a shallow black-sand lake, surprisingly warm for its altitude. Below it, a serpentine outlet leads to the larger of the sister lakes, Laslui, flanked to the north and south by two great fortresses, Mounts Tomias and Terraze. Each is composed of striated layers of sedimentation vaulted skyward by shifting platelets in the Earth's crust, then eroded by glaciation and weather to expose strata of exotic rocks. Their closest cousins are not the Rockies but geomorphic compositions found far out in the Pacific.

For several miles below Laslui, the Stikine meanders through flat grass-

---

Previous page, *B.C. Hydro engineer Bill Seyers points to the proposed site of a 75-storey dam in the Stikine River's Grand Canyon.* **Right,** *a rushing streamlet from an unnamed glacier feeds the headwaters of the Stikine in British Columbia's Spatsizi wilderness.*

BOREAL INSTITUTE
LIBRARY

Stacked like cordwood in the Stikine fish-processing cooperative, frozen salmon represent a fundamental source of food and income for native and white fishermen alike.

lands until it suddenly breaks out in earnest at Fountain Rapids, never again to be stalled by pond, marsh or lake. We camped above the rapids for the view. Curtains of mist hung above a vortex that rushes through narrow funnels and cascades off undercut ledges. As the evening chill crystallized the stars, vapours from the lake-warm river mixed with the white-water mists and encircled a crescent moon rising in the south. The northern lights formed a double helix, a giant DNA molecule rotating across the northern heaven.

Downstream from Fountain Rapids, below the portage at Chapea Creek, the Stikine enters the Metsantan Valley through pink granite gorges. Metsantan was the last site in the interior freely inhabited by the Tahltan people before the federal government convinced them, in 1950, to become centralized to the services at Iskut, Dease Lake and Telegraph Creek. The Tahltans, according to George Emmons, who explored the Stikine for Western Union in 1904, originated from the eastern Athabasca culture and shared close patriarchal ties with the Nahani.

Although the fur trade brought posts to the perimeter of the upper Stikine, only the occasional white trapper travelled into the valley. Finally, at the turn of the century, two brothers named Hyland, from Telegraph Creek, started a trading post on the Spatsizi, seven miles up from its confluence with the Stikine. When a second entrepreneur set up shop, both ventures went belly-up. In 1948, Tommy and Marion Walker came through Metsantan by horseback from Bella Coola and established a guiding operation at Cold Fish Lake. Later, with help from Tahltan families such as the Jacks, the Quocks and the Abous, a second base was built at Hyland Post.

The creation of the Spatsizi Wilderness Park was the result of years of interest in a wilderness conservancy by the Walkers, although the actual boundaries were drafted by government agencies. It was election time, and the plan unexpectedly became a priority. Stamp, stamp, and suddenly, the people of British Columbia had a "Class A wilderness park," whatever that meant. I am of the opinion that the wilderness, the pure virgin wild, died when man marked his first trail or killed his first caribou. Maybe what we call wild is only a state of mind by which we tether ourselves to the primitive. Possibly the wilderness is simply a setting where nature rules man, and our quest for mastery over the environment is limited to the width of a tent and the tenure of a driftwood fire.

Ironically, management of the wilderness is a contradiction in terms: how can a region like the Spatsizi be both "wild" and "managed" simultaneously? The more one sees of the inner workings of a wilderness, the more one realizes that it far exceeds the sophistication of our management tools. And tinkering with the wild seems tantamount to a child tuning a Swiss watch with a pipe wrench and a stone. Still, within a few months following our expedition, I would be back in the Spatsizi, this time enveloped in the fury of winter, with a scientific team radio collaring 35 adult caribou. The four-year project to provide baseline information for park managers was initiated by the Spat-

Association for Biological Re-
h, a private foundation started
ommy Walker and cosponsored
e World Wildlife Fund, the B.C.
stry of the Environment, the
ard Ivey Foundation and the
couver Foundation.

hile it is true that putting bright
adio transmitters on wildlife is it-
detracting from the wilderness –
e would say making it into a zoo
ne influences of man upon the
ge make the laissez-faire ap-
ach to management impossible.
haps a zoo is preferable to a mu-
n.

orgetting that the wild is relent-
, intolerant and unforgiving can
e immediate consequences. For
s, the Rat Expedition had been
ed into lethargy by long sections of
nquil river and by the boredom of
erpetual downpour. Suddenly, as
r canoes turned a blind bend, we
nd ourselves heading directly into
boulder-strewn narrows of Jewels
yon. Running this stretch need
t be heroic if you can select your
ute in advance. Fiegehen and I did
t have that luxury. We passed
rough the granite grove without
ajor collision only to realize that we
ere irretrievably committed to run-
ng a second set of rapids, this time
om the wrong side of the current.

wollen by rain, the roaring current
as far more powerful than we had
nticipated. We tried to cut across,
ut in midcurrent, we saw below us
flat subsurface rock with a long tail
f white water. We were not going to
lear the boulder, so rather than take
at an angle, I swung the bow straight
t it, hoping to catch water off the side
url. But there was no side curl, and
e white water had no buoyancy.
he downstream side of the rock was
oo steep, the backwash too high. Our
anoe dove like a dolphin.

The shock of cold water was severe
nd immediate. It took many pre-
ious gasps before I could call down-
stream to the other canoe. Somehow,
above the noise of the rapids, they
heard us. Fiegehen's head and shoul-
ders were bobbing by the canoe. I
took the stern line and headed for
shore. Swimming and lunging, I fi-
nally drew close to a series of ledges
protruding from the bank. But the ca-
noe, still caught in the current, was
dragging me helplessly over the
rocks. Again, I was swept close to an
outcrop. This time, I anchored long
enough to pivot the canoe out of the
current before I was catapulted into
the backwater below. Reaching shore
just as Chaplin came up the bank, I
assured him that I was all right, and
he scrambled over a jutting slab of
granite to find Fiegehen clinging to
the other side.

We had been in the water less
than 10 minutes, but the cold had ex-
acted its toll. Breathing was con-
fined to shallow pants, and muscles
were violently cramped. Fortunately,
Chaplin and Roland followed a text-
book-perfect drill for combatting hy-
pothermia. They had a fire going im-
mediately, and we were stripped of
our wet clothing. Dry clothes, warm
sleeping bags, soup and hot choco-
late. Even the sun came out for a mer-
ciful moment.

SUNKEN DREAMS

Below the confluence of the Pitman
River, the Stikine enters an area of gi-
ant slides for the next 60 miles. Every
other bend is pocked with moving
slabs of gumbo clay and toppled fo-
liage, the result of water from muskeg
swamps seeping through seams of
gravel and clay, undercutting the top-
soil and carrying it down to the river.
Sidewinding its way across time, the
river eats away one bank and depos-
its its contents on downstream sand-
bars. One wonders how the presence
of a flood lake would affect the tenu-
ous stability of the land. It is certain
that when the slides stopped sliding,
the shoreline would look nothing like
the lake drawn on Hydro's blueprints.
Yet given the natural course of the
Stikine, it is unlikely that in a hundred
years, it will look anything like the
present channel, even without the
dam's reservoir.

In man's short history on the river,
the Stikine has become a graveyard
for grandiose dreams. The largest was
the British Columbia Railway grade
designed to connect Fort St. James
with Dease Lake and to "open the
wealth of the North." The idea was
soon abandoned, leaving a colossal $3
million bridge spanning the river.
Stretching from nowhere to nowhere,
the bridge has never carried a train,
and if Hydro has its dam project, it
will be underwater by the year 2000.
Ironically, as our tiny canoes passed
beneath the lattice of beams and sup-
ports, I was struck not by revulsion at
its absurdity but by admiration for its
aesthetics – its hard geometric order
against the roughness of nature.

Twelve miles downstream, we
landed at the Cassiar Highway bridge
to begin our portage around the
Grand Canyon. We stopped to eat at
the Tatoga Lodge, where we were
joined by Mike Jones, a partner in the
lodge. Jones first came to the Stikine
as a fishery biologist for B.C. Hydro
in 1979. But he fell in love with the
isolation and beauty of the region and
quit his job to settle there. Now, he is
bitterly against the Stikine dam proj-
ect. In his view, the country will never
be the same after thousands of work-
ers come for the projected 10 years of
construction. He is convinced that
boom-town pressures would kill the
Tahltan culture and the fragile wil-
derness that cradles it.

Others, who derive their living
from fish and wildlife, are concerned
that the dams will do significant dam-
age to the indigenous biology. Up-
stream, this may be limited to the loss
of habitats for caribou, moose and
goats. But downstream, the effects
of channelization, water-temperature
changes and flow control could de-
stroy fisheries and all the secondary
systems supported by them. Hydro is
required to conduct environmental-
impact studies into these possibilities,
and to their credit, more than $4 mil-
lion has been spent on such research,
including some support for the first
year of the Spatsizi caribou project.
Critics, however, are quick to point
out that this is only a tenth of the $40
million spent on geotechnical feasibil-
ity studies. Furthermore, biological
systems are not static, and Hydro's
schedule and budget do not entail
monitoring over extended periods of
time.

Proponents of alternate energy sys-
tems – such as Jim Fulton, MP for
Skeena – argue that the Stikine is
ideally suited to other types of tech-
nology less destructive than high-
head dams. For example, high-veloc-
ity/low-head generation would work
well in the Grand Canyon because of
the numerous narrow chutes. "High-
head dams are too final," says Fulton,
"and they leave no room for the new
technology. What we may well find
in the next decade is that they are di-
nosaurs that we cannot get rid of."
The B.C. Utilities Commission ech-
oed his fear: "Hydro's approach ap-
pears so heavily focused on large
projects that it is difficult to obtain
adequate assurance that other supply
options receive adequate considera-
tion."

The effect of heavy siltation on the life expectancy of the dams is also at issue. Hydro predicts that the Stikine dams will last thousands of years, and the Iskut at least 500 years. But many critics believe that a few hundred years for the Stikine and 80 to 120 years for the Iskut is closer to reality. I asked Don Moore, a geologist for Hydro, what happens once a dam becomes so impacted with slides and silt that it is no longer operable. "Well, you glaze it over with topsoil," he said with a smile, "and you have the best farmland in the North . . . with one hell of a waterfall at the end!"

The single greatest factor working against Hydro is the cost of the project at a time when roughly one-half of the provincial debt has been incurred by the power authority. (In 1982, B.C. Hydro was the second largest borrower on the world bond market.) This financial burden is largely due to a grab bag of megaprojects, which, if actualized, would see the damming of the Peace River at Site C, the damming of the Liard and the completion of the Hat Creek coal project. Hydro is convinced that increasing energy demand necessitates projects like the Stikine, lest the province be faced with shortages in the next two decades. However, Hydro's growth projections have been significantly in excess of those predicted by British Columbia's own Ministry of Energy, Mines and Petroleum Resources. If surpluses occur, counters Hydro, electricity can be sold to the United States. But, as Irving Fox of the Westwater Institute says, the dollar return on the surplus sold in the last few years has not even covered the interest on the debt of the money spent to produce it. At the same time, the cost of northern projects is appreciably higher than similar endeavours farther south: the cost of the Stikine-Iskut project would be $4,000 to $6,000 per kilowatt compared to the Peace Canyon Dam completed in 1980 at $730 per kilowatt.

For those living within the watershed, the dam issue is not reducible to finances. Speaking for the "Residents for a Free-Flowing Stikine," Joe Murphy, a homesteader near Telegraph, said, "The future we envision for ourselves is not that of dams, reservoirs, transmission lines and instant boom towns. Rather, we see for our area a just settlement for the land claims of the Tahltan peoples, and we see the development of a regional economy based on commercial fishing, agriculture and the older ways of trapping and outfitting."

There are others who see the dams as new vitality to a stagnant economy. Besides employment, they expect that the influx of people will bring better schools and health services (the nearest hospital is more than 120 miles away). And it is likely that should the dams proceed, the availability of power to the area would provide an impetus to develop other projects, such as the Shaft Creek copper deposits, rumoured to be the largest in the world. Bill Sampson, a farmer and fisherman on the lower Stikine, says that too many people on the river want to deny progress. "You can't say, 'I have my piece of the pie, but you can't have yours.' Besides, where is the horror in selling power, especially if it's from a renewable resource?"

Not all the debate has been limited to the lines of the law. In the last three years, a Hydro trailer camp and a helicopter fuel dump have inexplicably burned to the ground. A helicopter was painted with anti-Hydro graffiti, and there are reports that potshots were taken at some Hydro vehicles.

TENACIOUS GOATS

Fiegehen and I rode a helicopter to Hydro's Tanzilla camp on the rim of the Grand Canyon. From above, the canyon looked like a ragged incision cut in the Earth's abdomen. White water that took half a day to portage was a narrow suture, barely perceptible against the length of the river. The upper rim was a maze of blue-green conifers, marsh-grass swamps and grey scars from forest fires that had swept the rolling landscape and died abruptly at the canyon's edge. In stark contrast, the lower reach of the canyon rim is a desert that extends downstream below Telegraph Creek – a meteorological fluke caused by the sweep-and-dump effect of Pacific weather coming over the Coast Mountains, creating a rain forest in the mountains and a desert in its vacuum. To the south, rust-red lava tentacles reach out from the ash cones of Mount Edziza.

Hydro's Tanzilla camp sits at the top of a dramatic precipice overhanging the Stikine. There is no road access, and so the camp has been built and supplied exclusively by helicopter. From the air, it looked like a tent city transposed from the Klondike: straight rows of tents, wooden sidewalks packed onto a muddy clearing. The only flaw in the illusion was the traffic jam of helicopters waiting for a landing pad.

Bill Seyers, a geological engineer with Hydro, met us and gave us the grand tour of the operation. From an engineering standpoint, the deep canyons where Hydro wants to place the dams would be capable of storing millions of cubic feet of water without creating reservoirs with vast surface areas. Tanzilla and Site Z are but two of five dams in the proposed complex. The other three would be located to the south of Mount Edziza, at Moore Creek, Forrest Kerr Creek and the Iskut. Hydro is still a long way from the construction phase, Seyers pointed out, and presently, core samplings of the rock are still being taken at the various sites to evaluate the project's feasibility. Possibly, both dams on the Stikine would be concrete arch dams, but Hydro is also considering a fill dam at Site Z. The dams are designed to work together in hydro-kinetic balance so that the one at Site Z would impound a large flood lake (33,600 acres), thus acting as a discharge stabilizer, while the Tanzilla dam would be on a run of the river, with little capacity for water storage. The Site Z dam would tower 75 storeys above the river, the Tanzilla 70 storeys. A swath 170 yards wide would have to be cut to accommodate the three 500-kilovolt transmission lines.

It was moving day at Tanzilla. The site was to be closed for the winter, and pack and parcel were being transported upriver to Site Z. Seyers asked if we would like to hitch a ride and see some of the canyon on the way.

The helicopter rose above the rimrock, swung downstream to the west, then suddenly descended into the Grand Canyon. Enveloped by huge cliffs, we glided down a telescopic slice of the Earth's crust, a masterpiece of rare earth colours: hag's-hair-streaked andesite, greys, greens and blues, sunburst basalt oxides hot from the planet's core. Before us rose a sheer 300-yard stone buttress, and midway up on a sedimentary shelf, possibly a yard wide, stood six moun-

Blissfully ignorant of B.C. Hydro's plans to flood their habitat, two mountain goats clamber onto a slab of fallen rock (midway along the ledge) in the Stikine's Grand Canyon.

tain goats – more than 360 goats live in the canyon. Descending toward the river, the sound of the helicopter rotors was lost in the thunder of the raging water. There are places where the gorge shrinks to a nine-foot-wide chute, and the force of the water crushes everything that enters its vortex, turning whole trees into splinters and boulders into sand. I was saddened to imagine that one day, this splendour might be underwater.

Not only would this be Hydro's largest source of power – 2,800 megawatts, or enough to feed one million homes – it would also be the most expensive. Perhaps fearful of public backlash to a $12.4 billion scheme, the provincial government has kept its plans and explorations in the Stikine quiet, even denying at times that it was interested in developing the area. Vancouver *Sun* editor Jack Larsen uncovered clandestine activity near the Stikine in 1971, when he bumped into a work crew while on his holidays. It turned out that he had found employees of Brinco Ltd., a major hydroelectric developer and builder of Newfoundland's $900 million Churchill Falls hydro project, conducting secret surveys of the river. Government denials were issued but were soon followed by the revelation of plans to flood 200 miles of the Stikine and Iskut Rivers.

Most directly affected by Hydro's manoeuvrings have been the Tahltan Indians, who make up the majority of the population of Telegraph Creek, one of whose residents was recently given a year's probation after he had discharged a rifle in the general direction of a Hydro consultant's vehicle. "It wasn't a 100 percent sure thing that the shooting incident was Hydro-related," commented one Royal Canadian Mounted Police officer from Dease Lake. "Liquor-related probably had a bit to do with it."

Frustration, of course, is not a legal defence, but the Tahltans have been living under the threat of hydroelectric development since 1961, when it was learned that Hydro had started its first "reconnaissance stages" of the project. According to a report on the future of the Stikine Basin, recently published by the Department of Indian Affairs and Northern Development, the Tahltans regard the project as a direct challenge to their way of life.

"We've been hearing about these dams since the '50s," says Gordon Franke, in line to be a hereditary Tahltan chief, "and it's caused a lot of apprehension and distrust around here. We never get any answers from Hydro. It seems like every time we talk to them, it's like running up against a brick wall."

Franke recalls the visit of one Hydro official who brought copies of an environmental studies report conducted for the government. "But he only kept them here for a couple of hours," says Franke, "and he told us there weren't enough copies to leave any behind. He took a lot of notes, then went back to Vancouver and told the papers that the Indians were in favour of the dams."

The Tahltans fear the introduction of more than 5,000 transient construction workers to their lands and worry that fishing and hunting, upon which they still depend heavily, will be ruined. Chief Band Councillor Ivan Quock says that even access roads for survey and drilling crews can wreak havoc on wildlife balances. (In one road-access battle in 1981, Hydro was denied a permit to build a trail into its Site Z on the Grand Canyon when the Lands Branch demonstrated that Hydro could collect its drilling information without creating a road. Brian Wilkes, a biologist for the Lands Branch department, confirmed the Indians' worst fears: "We have documented proof that Hydro's cat [tracked-vehicle] trail into Devil's Gorge [a proposed dam site on the Liard River] quickly turned into a gravelled, hard-surface, all-weather four-lane highway.")

"It's so easy to drive in and shoot a moose," says Quock. "We think complete studies must be done before any roads are built." Quock says that he failed to convince Hydro even to reveal to the Band what land-use permits have been granted for the areas in which they were working.

The Tahltans, in fact, claimed 50,000 square miles of traditional aboriginal lands covering the entire Hydro project in 1910. The Declaration of the Tahltan Tribe reads, in part: "We claim the sovereign right to all the country of our tribe – this country of ours which we have held intact from the encroachments of other tribes, from time immemorial, and at the cost of our own blood."

"That declaration is a fine document," said George Asp, president of the Association of United Tahltans, "but we haven't had a reply since 1910. I mean, the mail is slow, but this is ridiculous."

Turning serious, Asp says that his people have no choice but to oppose the dam. "Without this land and without this river system, we don't exist."

HISTORIC JUNCTION

The intersection of the Stikine and Tahltan Rivers is sacrosanct for the Tahltan people. Standing like the bow of a galleon is a rock rampart some 300 feet high. Carved by nature in pointillistic relief across the bowsprit is a giant basalt eagle, its feathers fanned and wings outstretched (basalt and sand are nature's marble and mortar). Capping the bulwark is a large freestanding monolith towering 60 feet above a savanna plateau. According to legend, the Tahltans were created by a union of the Wolf and Raven Clans in a cave at the base of the eagle's tail.

On this site, the Tahltans traded, dried fish and berries in the summer and caught salmon with the Tlingit Indians of the coast. The Tlingits traded with the Russians, and under the influence of the great Chief Shakes, their trading ranged from Juneau to Ketchikan along the coast and inland up the Taku and Stikine. In 1838, Hudson's Bay explorer Robert Campbell arrived at the Terror Bridge, which the Indians had built across the Tuya Gorge. "This primitive support looked so frail and unstable and the rushing water below so formidable that it seemed well-nigh impossible to cross it," Campbell wrote in his journal. Still, he managed, and he later took possession of the area by hoisting the Hudson's Bay Company flag and by carving H.B.C. into a tree. Thus began a land-claims dispute that has yet to be resolved.

It was at the junction of the Stikine and Tahltan that a Texan kayaker, despite repeated warnings, tried to run the river down to Telegraph Creek. They say that he did not make it through the first set of standing waves, and his body was retrieved from a downstream fish net. Iskut Trail and River Adventures offers a safe rafting trip from Tahltan to Telegraph, but it is not for the casual canoeist. In fact, contrary to rumour and barroom boasts, the Grand Canyon on the Stikine has never been navigated. An international team of kayakers tried it for *ABC's Wide*

Included on the river's endangered list are the Tahltan Indians, who have fished, hunted and traded along the Stikine for some 10,000 years.

World of Sports, but they soon had to be airlifted by helicopter over much of the white water.

The village of Telegraph Creek, whose buildings range from broadaxe log to vacant Victorian, is the last navigable point coming upriver from Wrangell, the last outpost at the end of the road and the only settlement on the Stikine. It traces its origin to 1861 and the discovery of gold downriver by a miner named Alexander ("Buck") Choquette. Rumour of the strike exaggerated its worth but prompted the Crown colony of British Columbia to annex the Stikine Territory in 1863. The following year, an American named Perry Collins convinced Western Union to finance an overland telegraph line with Europe via the Bering Strait. But no sooner had the line reached Telegraph Creek than the trans-Atlantic cable was completed, and Collins' dream collapsed.

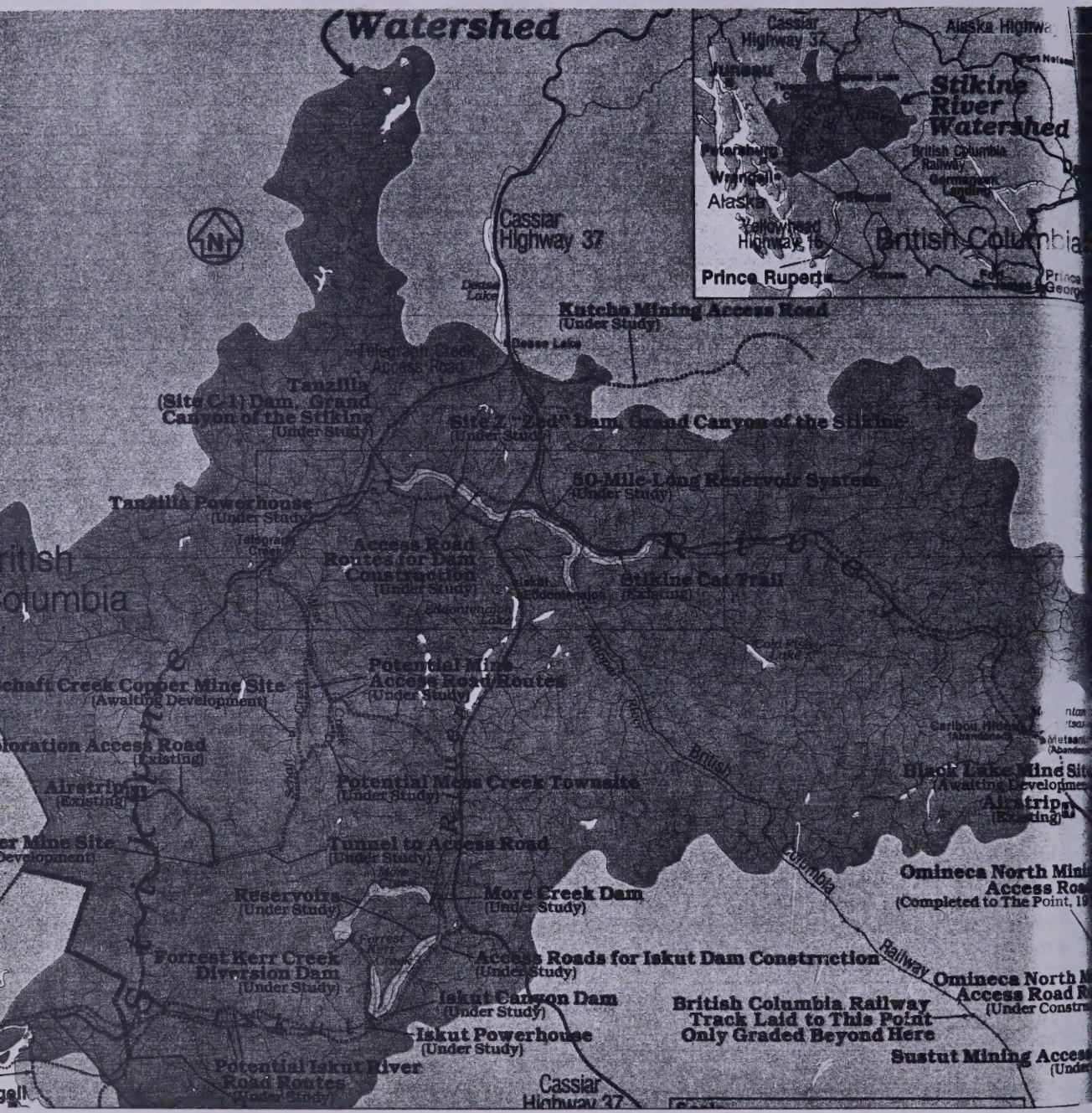
There was another short-lived gold rush in the Cassiar Range, but it was the Klondike stampede that ultimately brought Telegraph Creek into the boom. The Yukon Telegraph Line crossed the Stikine and connected Dawson with the rest of Canada in 1901. Stern-wheelers and diesel riverboats kept Telegraph Creek alive, and in 1928, with the completion of a primitive road to Dease Lake, the Stikine became a major supply line to the interior. However, commercial river traffic stopped in 1969, when the Cassiar Highway 37 connected Dease Lake to the southern part of the province.

At Dease Lake, Chaplin and I stopped at the health clinic and were told that we both had advanced cases of bronchitis (the result of too many rainbows). The cure: Get off the river until clear lungs and clear skies prevailed. Dan Pakula and David Fisher, fishermen/freighters on the lower river, invited us to accompany them to their fish camp at the foot of Great Glacier, where we could recover and rendezvous later with Fiegehen and Roland.

It was good to be on the river again, although being propelled by a Mercury outboard, instead of canoe paddles, took some getting used to. We passed without incident through a cluster of midriver rocks, the Three Sisters, which were once barriers to upstream traffic. Then, around a long bend, we saw Mount Glenora rising steeply from the Glenora Flats.

The stretch from Glenora Flats to the Chutine River has become dotted with homesteads over the last decade. As Pakula and I stood in the clearing that cradles his log cabin, a few outbuildings and a lush garden, he reminisced about his first years on the homestead, when dog teams pulled supplies up from the river. But the settlers on the lower Stikine present a dilemma. Because they arrived after the Homestead Act was rescinded, they are, in the eyes of the Crown, squatters. Some have received agricultural leases, although none have long-term tenure to the land. And their presence poses a challenge to the Tahltan land claims, for the natives contend that the land is theirs by ancestral lineage.

Just below the Chutine River, the Stikine enters a formidable breach in the Coast Mountains. The valley bottom with its rich black soil is occupied by great cottonwood, black spruce and a dense rain-forest vegetation of ferns, fungus, mosses and devil's


Watershed
Cassiar Highway 37
Alaska Highway
Stikine River Watershed
British Columbia
Alaska
Prince Rupert
Kutcho Mining Access Road (Under Study)
Tanzilla (Site C-1) Dam, Grand Canyon of the Stikine (Under Study)
Site Z "Zed" Dam, Grand Canyon of the Stikine (Under Study)
50-Mile-Long Reservoir System (Under Study)
Tanzilla Powerhouse (Under Study)
Access Road Routes for Dam Construction (Under Study)
Stikine Cat Trail (Existing)
Potential Mine Access Road Routes (Under Study)
Potential Mesa Creek Townsite (Under Study)
Tunnel to Access Road (Under Study)
Reservoirs (Under Study)
More Creek Dam (Under Study)
Forrest Kerr Creek Diversion Dam (Under Study)
Access Roads for Iskut Dam Construction (Under Study)
Iskut Canyon Dam (Under Study)
Iskut Powerhouse (Under Study)
Potential Iskut River Road Routes (Under Study)
British Columbia Railway Track Laid to This Point Only Graded Beyond Here
Omineca North Mine Access Road (Completed to The Point, 19
Sustut Mining Access
Cassiar Highway 37

club. The river eats away forest banks, toppling ancient trees and carrying them off to be packed into log-jams or stranded on sandbars. Still, for all the vitality of the river bottom, it is the coastal range that captures the imagination. Granite cliffs loom over the river, and when the rain is in the mountains, these cliffs, scoured by glaciers and avalanches, stand hard and smooth like cast-iron skillets.

From midsummer through fall, a tight nucleus of families moves to the lower Stikine to fish the Pacific-run salmon. Many are from Telegraph Creek, though some come from as far south as Prince Rupert and the Queen Charlotte Islands. The Alaskans have fished the mouth of the Stikine since the early 1900s, but commercial fishing for Canadians has been possible only in the last five years. Initially, 60 licences were issued, but after two years, the harsh environment and high costs drove not only many fishermen off the river but also the only fish-processing plant, brought in by B.C. Packers. The following spring, however, the 25 remaining licensees organized two processing facilities to handle their catches: the Stikine Salmon Company, better known as the Fireboat, and the Great Glacier Company, or the Co-op.

The *J.H. Carlisle*, once the pride of Vancouver's fireboat fleet, was dry-docked until David Pugh and Gunther Klaus saved it from the salvager and brought it up the Stikine. Pragmatism guided the restoration. While the processing area and freezers are regulation clean and efficient, the crew house and continuous cribbage game are quartered in a small house trailer parked on the bridge. The shower is anchored to the bow railing without benefit of privacy or a shower head. The "summer kitchen" is a Coleman stove supported along the port rail.

A Tlingit Indian totem on Chief Shakes Island stands mute guard over the rich coastal waters of the lower Stikine.

What the Fireboat is to individual enterprise, the Co-op is to collective endeavour. Perched on a steep bank above the river, the Co-op facilities are built, supplied and run exclusively by its fishermen members. Like the Fireboat crew, they are determined to keep fishing the Stikine. Above the dining room table is a hand-printed poster detailing the effects the dams would have on the lower river: "drying of sloughs, temperature changes in the water, channelization, nitrogen and oxygen reduction, leaching out of toxic minerals."

But Hydro is only one problem facing the fishermen. They are also locked in a boundary-water fight with Alaska. For over 20 years, Canada and the United States have been negotiating for a West Coast salmon treaty, and although resolution seems close, many fishermen fear that Ottawa will trade off the Stikine to the United States in exchange for fishing waters in the south.

The Stikine fishermen are vulnerable. Not only is their future overshadowed by the dam plans and by catch allotments, but they must deal daily with the raw environment. A sign hangs above the tent-frame doorway at Fisher and Pakula's camp: "Boat (Bōt), a hole in the water, surrounded by aluminum, into which one pours money." The same can be said for fish nets and outboard motors. Day begins with dressing for the occasion: four layers if the weather is good, seven if it is bad, life jackets, half a dozen pairs of dry gloves per person. At least two spare propeller blades are on board. "The river eats props faster than we can bring them in," reflected Pakula, as the boat smacked a submerged log on our way upriver to their nets. The river had risen over nine feet that day and was running the colour and consistency of a chocolate malt. The first set of nets extended just far enough into a newly formed back eddy to fill them with logs and brush from the swollen river. "Catching them by the cord," grumbled Fisher, as the deck of the boat became covered with devil's club and waterlogged wood. At the second set, they had better luck, and the ice crib began filling with fish. Not all the coho caught were destined for the distant spawning grounds on the Tahltan, as some spewed eggs as soon as they were touched. These were thrown back. Others were brilliant red, their metabolic clocks fast running down – they would soon be bear food. One fish's head was chewed off. "Harbour seals," muttered Pakula, as he threw it in a pail for camp food.

The next day, after a wanton breakfast of blueberry pancakes, salmon steaks and fisherman's brew (Red Zinger tea with a shot of grain alcohol), Chaplin and I decided to hike back to Great Glacier. Accompanied by Willow, a camp hound along to fend off grizzlies, we followed the boulder-strewn outlet stream from the glacier's lake until its current forced us up the bank to the willows. Heavy undergrowth kept us from glimpsing the glacier until we suddenly broke out of the thicket onto a barren beach of snow-white sand.

Before us, ice and reflections of ice on a flawless mirror lake stretched to the horizon like a miniature Arctic Ocean. The glacier swept in scalloped curves down a long valley from the north, ending in a labyrinth of broken shark's tooth columns, prisms with translucent turrets looming over cobalt-blue crevices. Great iceberg slabs of rock and ice had been heaved together along the glacier's edge. It was not so long ago that the glacier crossed the Stikine Valley to join the Choquette Glacier, thus forming a solid ice field more than 98 miles long. Legend has it that when the first interior Indians who migrated down the Stikine were confronted by the ice barrier, they tested the river's course first by sending logs through it and then old women in canoes.

We ate lunch on a peninsula extending some distance into the lake. In spite of the promise of food, Willow refused to follow us. "You don't suppose she knows something we don't?" Chaplin asked. From our vantage, we could clearly hear the monotone groan of the glacier. From a distance came an aria of pressures and stresses, as cracks and ruptures echoed through ice corridors. A loud report boomed across the lake when the ice gave way under a massive boulder hanging on a frozen perch. Almost simultaneously, a small piece of peninsula that we had supposed to be bedrock broke off beside us, exposing a shelf of clear undercut ice. With a speed neither of us thought possible, Chaplin and I were back on solid ground with Willow.

Early the next morning, well before the fog was off the river, I went with federal Department of Fisheries and Oceans officer Tom Munson to some of the major sloughs around the international border. We entered a long slough tucked in the eve of Mount Flemer. Bowling-green grass skirted the edge of the motionless water. Crosshatching the sand and silt shoreline were the tracks of moose, beaver, mink and martin. It was a setting for woodwind and flute, with oboe solos for the broken hulks of tree trunks jutting from the marsh and a bassoon for the primeval monster whose bullet-shaped head rose from the lagoon. Startled, we stared at the harbour seal. Equally astonished, he gaped at us, blinked and dove from view.

Much of the lower Stikine's biology is dependent on the slough system. Munson is convinced that the sloughs are important estuaries that protect salmon fry. In turn, the mature salmon become the mainstay for carnivores such as bear, seals and the lesser furbearers, as well as for birds of prey such as ospreys, bald eagles, gulls and scavengers. The nutrient-rich forage lining the sloughs is the base habitat for moose and deer. Munson fears that dams on the upper Stikine would have irreparable consequences. The stabilization of water flow would eliminate spring flooding and thus its role in flushing debris from the valley bottom. With dams holding the spring and summer run-off, the cold water from the glaciers lining the lower river would dominate the flow, dropping the temperature to a few degrees above freezing. In the winter, the opposite would be the case, due to the influx of warmer impounded water. These fluctuations would influence the natural incubation and growth of the salmon.

A watershed is a living system. Its tentacle roots, like a tree's, draw nutrients from the high alpine, absorbing the refuse of avalanches and mud slides, glaciers and spring floods, digesting the microscopic debris of dead salmon after the spawn and using all this to create the delta foliage. The delta mud flats are source and shelter for the unattached, for the bivalves which suck in the rich ooze and the worms that burrow through it. The salmon and the steelhead fry use the saline tidal pools as adapting areas between freshwater and saltwater, a place for biochemical regulation, for adjusting to a new diet,

The Stikine Delta, marking the end of the river near Wrangell Island in Alaska.

new dangers, new survival strategies. Grasses and willows grow, binding the flour-fine silt into sod, creating a fertile estuary for habitant birds and the seasonal migrators.

It is unclear what effects a dam would have on the estuarine environment. Although interim reports released by Hydro concede that sediment supplied to the delta would be reduced, they conclude: "The structure of the delta would likely not be extensively altered." Not all hydrologists agree. The creation and maintenance of a delta is the result of saturated turbulent water, suddenly turned tranquil by the tides, releasing its load of sediment. Dams remove sediments. Whether the resulting channelization and scouring will extend into the delta remains to be determined, but the rate of delta growth would certainly be retarded, if not terminated.

Whatever the future of the Stikine River and its tributaries, Hydro's immediate plans were dramatically changed late in 1983 with the sudden announcement that the damming project would be delayed for "at least three to four years."

"We used to have a growth rate of 6 to 10 percent in electrical load," explained Stephen Rogers, Minister of Energy, Mines and Petroleum Resources. "If our load growth is in the 1 to 2 percent range, smaller projects can be built to meet demand. That's the way to go . . . from an environmental point of view, this gives us lots of time to do it right."

Few among the 30 or more public-interest groups that have opposed the dams are willing to relax completely and believe that Premier William Bennett's austerity budget will protect the Stikine in perpetuity. The Friends of the Stikine Society, which publishes a regular newsletter tracking problems within the watershed, has already promised not to disband and to "maintain our vigilance" over development proposals.

Long-term observers point to the $43 million already spent on the preliminary stages and suggest that British Columbia Hydro is not about to forsake its pet project after a minor budgetary setback.

One who will continue to watch the situation closely is Doug Blanchard, who owns a fish camp on the Stikine and who challenges the notion that giant hydroelectric projects represent a renewable resource. "The dams are permanent tourniquets," he says. "They're not renewable. Hydro tells us how the dams won't change the river, but show me one river that a dam hasn't changed.

"If more people only knew what there is here, they would realize that leaving the Stikine alone is money between the banks for other generations. It is a legacy that we can give to the future, one intact legacy that man hasn't messed with." ■

CONTACT

FRIENDS OF THE STIKINE
1405 Doran Road
North Vancouver, British Columbia
V7K 1N1
Membership: $10 minimum donation.

STEPHEN ROGERS
Minister of Energy, Mines and Petroleum Resources
Parliament Buildings
Victoria, British Columbia V8V 1X4

99999 Pam:620.9:621.22:(*429)
BAS

BASSETT, Lamont
A river for the taming

Borrower's Name	Date Due
Karen Taylor	FEB 9 [illegible]

99999 Pam:620.9:621.22:(*429)
BAS

BASSETT, Lamont
A river for the taming

Boreal Institute for Northern
Studies Library
CW 401 Bio Sci Bldg
The University of Alberta
Edmonton, AB Canada T6G 2E9

University of Alberta Library
0 1620 0335 5763